

IN THE CLAIMS

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application. Where claims have been amended and/or canceled, such amendments and/or cancellations are done without prejudice and/or waiver and/or disclaimer to the claimed and/or disclosed subject matter, and the applicant and/or assignee reserves the right to claim this subject matter and/or other disclosed subject matter in a continuing application.

Listing of Claims:

What is claimed is:

1. (Currently Amended) A calibration method ~~of an image scanning system having an image reading device for reading image information, said image reading device having at least a linear sensor consisting of a plurality of photo-sensing elements, said calibration method~~ comprising:

reading image information comprising sensing values ~~from a calibration plate having a plurality of pixels of an image of a calibration plate at least in a row~~, wherein a sensing value ~~of each said photo-sensing element of said image reading device~~ corresponds to one of said pixels;
determining a base value in accordance with said sensing values of said calibration plate;
computing respective differences between ~~said~~ adjacent sensing values;
storing said base value and said respective differences; and
calibrating image information of an object ~~captured by said image scanning system~~, wherein said base value is added to a first sensing value of the image information of said object and each sequential sensing value of the image information of said object is added by one of said respective differences corresponding thereto.

2. (Currently Amended) The calibration method of claim 1, wherein said base value comprises ~~comprises~~ [[is]] a minimum value among said sensing values of said calibration plate.

3. (Currently Amended) The calibration method of claim 1, wherein said base value comprises ~~[[is]]~~ a medium value of said sensing values of said calibration plate.

4. (Currently Amended) The calibration method of claim 1, further comprising ~~determining wherein~~ storage bits of one of said respective differences is ~~determined~~ depending on a distribution range of said respective differences.

5. (Currently Amended) The calibration method of claim 1, further comprising executing said calibrating image information of said object at least via ~~wherein the calibration of the image information of said object is executed by means of~~ an additive circuit and a compensating/computing circuit.

6. (Currently Amended) The calibration method of claim 1, wherein reading image information from a plurality of pixels of a calibration plate comprises reading image information from a plurality of pixels of said calibration plate is either of a white calibration plate and or a black calibration plate.

7. (Currently Amended) A calibration method of ~~an image scanning system having an image reading device for reading image information, said image reading device having at least a linear sensor consisting of a plurality of photo-sensing elements, said calibration method~~ comprising:

reading image information comprising sensing values ~~from a calibration plate having a plurality of pixels of an image of a calibration plate at least in a row~~, wherein a sensing value of ~~each said photo-sensing element of said image reading device~~ corresponds to one of said pixels;

determining a base value in accordance with said sensing values of said calibration plate;
computing a difference between said base value and each of said sensing values of said calibration plate;

storing said base value and said differences; and

calibrating image information of an object ~~captured by said image scanning system~~, wherein each sensing value of the image information of said object is added by said base value and one of said differences corresponding thereto.

8. (Currently Amended) The calibration method of claim 7, wherein said base value comprises ~~[[is]]~~ a minimum value among said sensing values of said calibration plate.

9. (Currently Amended) The calibration method of claim 7, wherein said base value comprises ~~[[is]]~~ a medium value of said sensing values of said calibration plate.

10. (Currently Amended) The calibration method of claim 7, further comprising determining ~~wherein~~ storage bits of one of said respective differences ~~is determined~~ depending on a distribution range of said respective differences.

11. (Currently Amended) The calibration method of claim 7, further comprising executing said calibrating image information of said object at least via ~~wherein the calibration of the image information of said object is executed by means of~~ an additive circuit and a compensating/computing circuit.

12. (Currently Amended) The calibration method of claim 7, wherein reading image information from a plurality of pixels of a calibration plate comprises reading image information from a plurality of pixels of said calibration plate is either of a white calibration plate and or a black calibration plate.

13. (New) An apparatus, comprising:
means for reading image information comprising sensing values from a plurality of pixels of an image of a calibration plate, wherein a sensing value corresponds to one of said pixels;
means for determining a base value in accordance with said sensing values of said calibration plate;
means for computing respective differences between adjacent sensing values;
means for storing said base value and said respective differences; and
means for calibrating image information of an object, wherein said base value is added to a first sensing value of the image information of said object and each sequential sensing value of the image information of said object is added by one of said respective differences corresponding thereto.

14. (New) The apparatus of claim 13, wherein said base value comprises a minimum value among said sensing values of said calibration plate.

15. (New) The apparatus of claim 13, wherein said base value comprises a medium value of said sensing values of said calibration plate.

16. (New) The apparatus of claim 13, further comprising means for determining storage bits of one of said respective differences depending on a distribution range of said respective differences.

17. (New) An article comprising: a storage medium having stored thereon instructions, that, if executed, result in:

reading image information comprising sensing values from a plurality of pixels of an image of a calibration plate, wherein a sensing value corresponds to one of said pixels;
determining a base value in accordance with said sensing values of said calibration plate;
computing a difference between said base value and each of said sensing values of said calibration plate;
storing said base value and said differences; and
calibrating image information of an object, wherein each sensing value of the image information of said object is added by said base value and one of said differences corresponding thereto.

18. (New) The article of claim 17, wherein said base value comprises a minimum value among said sensing values of said calibration plate.

19. (New) The article of claim 17, wherein said base value comprises a medium value of said sensing values of said calibration plate.

20. (New) The article of claim 17, further comprising determining storage bits of one of said respective differences depending on a distribution range of said respective differences.